

Customer No.: 31561
Application No.: 10/711,622
Docket No.: 12595-US-PA

AMENDMENT

In The Claims:

Claim 1. (currently amended) A polishing pad having a top surface, a back surface, and a sidewall connected to the top surface and the back surface, and the polishing pad is divided into a polishing region and a region neighboring to the polishing region, and the region is at the center or edge of the polishing pad, characterized in that:

at least one stress buffer pattern disposed in the region neighboring to the polishing region, wherein the stress buffer pattern comprises a plurality of trenches or at least one opening having a first depth less than a thickness of the polishing pad; and

a plurality of trenches with a second depth disposed on the top surface in the polishing region, wherein the second depth is different from the first depth.

Claim 2. (previously presented) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is formed on the top surface.

Claim 3. (previously presented) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is formed on the back surface.

Claim 4. (previously presented) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is formed on both the top surface and the back surface.

Claim 5. (cancelled)

Claim 6. (previously presented) The polishing pad according to claim 1, wherein the first depth of the trenches or the opening is less than half of the thickness of the polishing pad.

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Claim 7. (previously presented) The polishing pad according to claim 1, wherein a cambered surface is further formed on the sidewall, while the cambered surface is adjacent to the top surface.

Claim 8. (previously presented) The polishing pad according to claim 1, wherein a cambered surface is further formed on a side surface of the stress buffer pattern adjacent to the top surface.

Claim 9. (currently amended) The polishing pad according to claim 1, wherein the polishing pad is a circular polishing pad and the region having the stress buffer pattern therein is at the center of a central region neighboring to the polishing pad region.

Claim 10. (currently amended) The polishing pad according to claim 1, wherein the polishing pad is a linear polishing pad and the region having the stress buffer pattern therein is at the an edge of region beside the polishing pad region.

Claim 11. (currently amended) A method for fabricating a polishing pad having a top surface, a back surface, and a sidewall connected to the top surface and the back surface, and the polishing pad is divided into a polishing region and a region neighboring to the polishing region, and the region is at the center or edge of the polishing pad, the method comprising:

forming a stress buffer pattern in the region neighboring to the polishing region, wherein the stress buffer pattern comprises a plurality of trenches or at least one opening having a first depth less than a thickness of the polishing pad; and

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forming a plurality of trenches with a second depth on the top surface in the polishing region, wherein the second depth is different from the first depth.

Claim 12. (original) The method according to claim 11, wherein the stress buffer pattern is formed via a mechanical process, a chemical process or a molding process.

Claim 13. (previously presented) The method according to claim 11, wherein the stress buffer pattern in the region is formed on the top surface.

Claim 14. (previously presented) The method according to claim 11, wherein the stress buffer pattern in the region is formed on the back surface.

Claim 15. (previously presented) The method according to claim 11, wherein the stress buffer pattern in the region is formed on both the top surface and the back surface.

Claim 16. (previously presented) The method according to claim 11, further comprising formation of at least one cambered surface on the sidewall adjacent to the top surface so as to prevent particles from being generated due to abrasion of the sidewall during a polishing process.

Claim 17. (original) The method according to claim 16, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

Claim 18. (previously presented) The method according to claim 11, further comprising formation of at least one cambered surface at the join of the top surface and a side surface of the stress buffer pattern.

Claim 19. (original) The method according to claim 18, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

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Claim 20. (currently amended) The method according to claim 11, wherein the stress buffer pattern is formed in a at the center ~~central~~ region of the polishing pad.

Claim 21. (currently amended) The method according to claim 11, wherein the stress buffer pattern is formed in ~~an~~ at the edge region of the polishing pad beside the polishing region.

Claims 22-25 (cancelled).

Claim 26 (currently amended) The polishing pad according to claim ~~25~~ 1, wherein the first depth is greater than the second depth.

Claim 27 (cancelled)

Claim 28 (currently amended) The polishing pad according to claim ~~27~~ 11, wherein the first depth is greater than the second depth.